

CLAIMS

1. A warning device for attachment to packaging of a product which has an expiration date, the device comprising:

timer means for counting passage of a pre-set period of time, according to a timing program tailored to the product, to the expiration date, and for providing a signal at the expiration date;

an indicator arranged to receive said signal and to provide an indication to differentiate a pre-expiration date period from a post-expiration date period; and

a switch coupled to the packaging and arranged to activate said indicator when a person attempts to use the product.

2. The device according to claim 1, wherein said timer means includes timer means for counting a factory pre-set period of time from a manufacturing date until the expiration date.

3. The device according to claim 1, wherein said timer means includes timer means for counting a pre-set period of time from a date of first use until the expiration date.

4. The device according to claim 3, further comprising a trigger to cause said timer means to start a countdown from a date of first opening the product.

5. The device according to any of claims 1 to 4, wherein an indication signal is provided during a post-expiration date period, and no signal is provided during a pre-expiration date period.

6. The device according to any of claims 1 to 4, wherein an indication signal is provided during said pre-expiration date period, and no signal is provided during said post-expiration date period.

7. The device according to any of claims 1-4, wherein one kind of indication signal is provided during said pre-expiration date period, and another kind of signal is provided during said post-expiration date period.

8. The device according to any of the preceding claims, wherein said timer means and said indicator are electronic means.

9. The device according to any of the preceding claims, wherein said indicator provides an audible indication.

10. The device according to any of the preceding claims, wherein said indicator provides a visual indication.

11. The device according to any of the preceding claims, wherein said switch includes a mechanical switch.

12. The device according to any of claims 1-10, wherein said switch includes an electronic switch.

13. The device according to any of claims 1-10, wherein said switch includes a sensor.

14. The device according to either of claims 1 and 2, and comprising:
a printed circuit board (PCB) with a chip-on-board having a dedicated timing program for providing signals in accordance with the timing program;

an in-factory activated trigger for activating a timing countdown from date of manufacture;

an automatically activated switch for activating said indicator whenever the product is used; and

an internal power source for powering the device.

15. The device according to either of claims 3 or 4, and comprising:
a printed circuit board (PCB) with a chip-on-board having a dedicated timing program for providing signals in accordance with the timing program;

an automatically activated trigger for activating a timing countdown from the product's first use;

an automatically activated switch for activating said indicator each time the product is used; and

an internal power source for powering the device.

16. A method for providing a warning for a product which has an expiration date, the method comprising:

coupling to the product packaging

timer means for counting passage of a pre-set period of time, according to a timing program tailored to the product, to the expiration date; and an indicator for providing an indication to differentiate a pre-expiration date period from a post-expiration date period;

triggering said timer means to automatically begin counting passage of said pre-set period of time, and

automatically activating said indicator each time the product is used to differentiate pre-expiration from post-expiration.

5 17. The method according to claim 16, wherein said pre-set period of time is a factory defined product expiration time from manufacturing date.

 18. The method according to claim 16, wherein said pre-set period of time is a product expiration time from a first opening of the product packaging.

10 19. The method according to claim 16, wherein said pre-set period of time is a factory defined product expiration time from manufacturing date, or a product expiration time from a first opening of the product packaging, whatever happens first.

 20. The method according to any of claims 16-19, wherein the indicator provides a special signal at a time of a first opening, which acts as tamper evidence.

15 21. The method according to any of claims 16-19, wherein said indicator provides a signal which starts automatically when said product is used, and stops automatically when said product is put away.

 22. The method according to any of claims 16-19, wherein said indicator provides a signal which starts automatically when said product is used, and stops automatically after a pre-set signal time.